

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

Questions

1. Al-Khwarizmi's book was written around year 820 CE. How many years passed between 820 CE and 2025 CE?
2. Diophantus lived around 270 CE. How many years earlier was he than Al-Khwarizmi (820 CE)?
3. Egyptian papyri date to about 1650 BCE. How many years are there between 1650 BCE and 270 CE?
4. A historian studies 4 ancient manuscripts each week. How many manuscripts in 6 weeks?
5. An ancient text had 180 problems. If a student solves 15 problems per day, how many days to finish?
6. Algebra spread to 3 regions with 5 scholars each. How many scholars total?
7. An algebra workshop runs 8 hours a day for 3 days. How many total hours?
8. If 5 basic operations are explained and each takes 2 minutes, how many minutes to explain all 5?
9. A translation happened in 1150 CE. How many years after 820 CE was that?
10. An ancient system had 3 equations and 2 unknowns. How many more equations than unknowns?
11. Evaluate $2(5) + 3$.
12. If $f(n) = 3n + 1$, find $f(4)$.
13. Evaluate $4x - 2$ when $x = 5$.
14. Compute $y^2 + 2$ when $y = 3$.
15. Compute $5(a + b)$ when $a = 2$ and $b = 3$.
16. Compute $6 + (-3)$.
17. If $t = 7$ hours, what is $2t$?
18. Compute $(x + y)/2$ when $x = 6$ and $y = 4$.
19. Area $A = (\frac{1}{2}) b h$. Find A when $b = 8$ and $h = 5$.
20. If $g(x) = x^2$, find $g(2)$.
21. Compute $3(2) + 4(1)$.
22. Sum of the first n odd numbers $= n^2$. Find the sum of the first 5 odd numbers.
23. Compute $(x + 2)^2$ when $x = 3$.
24. How many positive divisors does 12 have?
25. Compute $a x^2$ when $a = 1$ and $x = 4$.
26. What is the next term in the sequence 2, 4, 6, 8, ... ?
27. Compute $(x + 1)(x + 2)$ when $x = 3$.
28. What is the sum of the roots of $x^2 - 5x + 6 = 0$?
29. Compute $2^3 + 3^2$.
30. Compute $2x + 3x$ when $x = 2$.
31. Distance from origin to point (3, 4).



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Math Worksheet for 9th Grade Overview and history of algebra

32. Midpoint of (1, 1) and (5, 3).
33. Slope of the line through (2, 2) and (4, 6).
34. What quadrant number contains the point (-3, 4)?
35. If you move right 5 and up 3 from (0, 0), what are the coordinates?
36. Distance between (-1, 0) and (2, 0).
37. Reflect point (2, 3) across the x-axis. What is the new y-coordinate?
38. Area of rectangle with opposite corners at (0, 0) and (4, 3).
39. If slope = $\frac{1}{2}$ and x increases by 6, how much does y increase?
40. What quadrant number contains the point (-4, -5)?
41. How many letters are in the English alphabet?
42. If $x = 2$, $y = 3$, $z = 4$, compute $x + y + z$.
43. If $a = 2$, $b = 5$, $x = 3$, $y = 1$, compute $ax + by$.
44. If variables x , y , z each can be 0 or 1, how many different combinations (x , y , z) are possible?
45. What position number is the letter x in the English alphabet?
46. If $a = b = c = d = 2$, what is $a + b + c + d$?
47. If $x = 10$, what is $3x$?
48. If an equation uses 3 constants and 4 variables, how many letters are used in total?
49. How many permutations of p, q, r are there?
50. How many ways to choose 2 letters from 5 distinct letters (order does not matter)?